A School of Agriculture, Mechanics, and Household Arts Admitting Pupils Upon Completion of the Eighth Grade.

CALIFORNIA
POLYTECHNIC SCHOOL

CATALOGUE 1911-12
ANNOUNCEMENTS 1912-13

SAN LUIS OBISPO
JUNE, 1912

FRIEND WM. RICHARDSON, SUPERINTENDENT OF STATE PRINTING
SACRAMENTO, CALIFORNIA
1912

CALENDAR, 1912-13.

Registration and Entrance Examinations—Tuesday, September 10, 1912

Instruction begins ——— Wednesday, September 11, 1912

Regular meeting, Board of Trustees ——— Saturday, October 26, 1912

Thanksgiving recess—Thursday and Friday, November 28 and 29, 1912

First term ends ——— Wednesday, December 18, 1912

CHRISTMAS RECESS.

Second term registration ——— Monday, January 6, 1913

Instruction begins ——— Tuesday, January 7, 1913

Second term ends ——— Friday, March 28, 1913

SPRING RECESS.

Third term registration ——— Monday, April 7, 1913

Instruction begins ——— Tuesday, April 8, 1913

Regular meeting, Board of Trustees ——— Saturday, April 26, 1913

Memorial Day ——— Friday, May 30, 1913

Graduation Day ——— Friday, June 13, 1913

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Ex officio.

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FACULTY, 1911-12.

(Arranged in Order of Appointment.)

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HARRIET HOWELL---------- *Domestic Art*

RALPH S. MIDDLETON, B.S.A.---------- *Dairying*

BELLE A. WILLIAMS---------- *Freehand Drawing and Applied Design*

JOHN W. NELSON, B.A.---------- *Chemistry and Physical Geography*

ROBERT W. RYDER, B.S.---------- *Physics and Electricity*

ALONZO R. CARRANZA---------- *Mechanics' Assistant*

EDWARD D. CURL---------- *Buttermaker*

JANE VAUGHN GILLETT---------- *Bookkeeper and Cashier*

CARRIE E. CASTLE---------- *Director's Secretary and Librarian*

MARY K. HARTZELL---------- *Manager Dining Hall*

ALONZO BROOKS---------- *Farm Foreman*

ALBERT D. SINCLAIR---------- *Gardener*

JAMES M. DUFFY---------- *Dairyman*

O. H. P. MECK---------- *Engineer*

LOCATION AND PURPOSE.

The California Polytechnic School is a state institution established at San Luis Obispo under an act of the legislature of 1901. Instruction was first given in October, 1903. The government of the school is vested in a board of trustees, consisting of the Governor and Superintendent of Public Instruction as ex officio members, and of five persons appointed by the Governor for a term of four years each. The school is located one and one half miles north of the center of the city of San Luis Obispo, on high ground commanding a beautiful view of town and valley.

"The purpose of the school is to furnish to young people of both sexes mental and manual training in the arts and sciences, including agriculture, mechanics, engineering, business methods, domestic economy, and such other branches as will fit the student for the non-professional walks of life." The school aims to supply a need which is felt not only in California, but also in every other state in the Union. That need is an institution which will give boys and girls a training in the arts and sciences which deal peculiarly with country life—the life of the home, the farm, the orchard, the dairy, and the shop. In this present day, when science is doing so much to unravel the mysteries concerning plant and animal life, it is important that the State provide a school where the facts and principles unfolded by science can be demonstrated to the boy and girl, who will return to their home and make its life more attractive, more livable, and more remunerative. In performing this service the school has in its nine years of activity demonstrated its efficiency in training its pupils for useful citizenship.

GROUNDS, BUILDINGS AND EQUIPMENT.

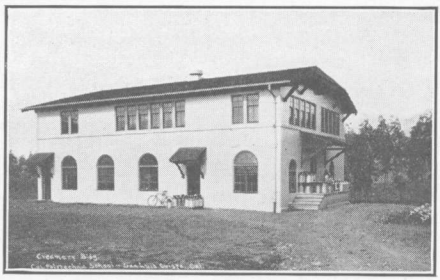
The Farm and Grounds consist of three hundred and eleven acres of land, the most of which is rolling and typical of a large portion of the coast counties. The farm is equipped with a complete line of modern machinery, and is stocked with registered Jersey and Holstein cattle, Percheron and Clydesdale horses, and swine of the Berkshire and Poland-China breeds, all of which are used for class study as well as for their customary purposes.

The school grounds have been laid out and planted under the direction of expert landscape gardeners, and their beauty adds materially to the pleasure of school life. The plantings include hundreds of varieties of ornamental and economic plants, which are all available for field and laboratory study in botany and horticulture.

School and Farm Buildings. The main buildings are two stories in height with well lighted basements. The Administration building contains the school offices, assembly hall, library, and several class rooms and laboratories. The household arts building contains sewing rooms, kitchen, dining-room, pantries, applied design workroom, laundry, botany laboratory and herbarium, class rooms and instructors' offices. The other buildings are a power house, carpenter shop, forge shop, machine shop, pumping plant, dairy barn and silo, creamery, plant propagation house, greenhouses, incubator cellar and poultry houses, swine houses, tool sheds, hay barns, and cottages for employees.

Boys' Dormitory. The dormitory is a new and modern building, providing rooms for a limited number of students and faculty members. A large sitting room with fireplace, steam heat, electric lights and baths are features of the building.

Dining Hall. A new building, with large kitchen and pantries in addition, conveniently located, serves as a central dining hall for faculty and student residents at the school.

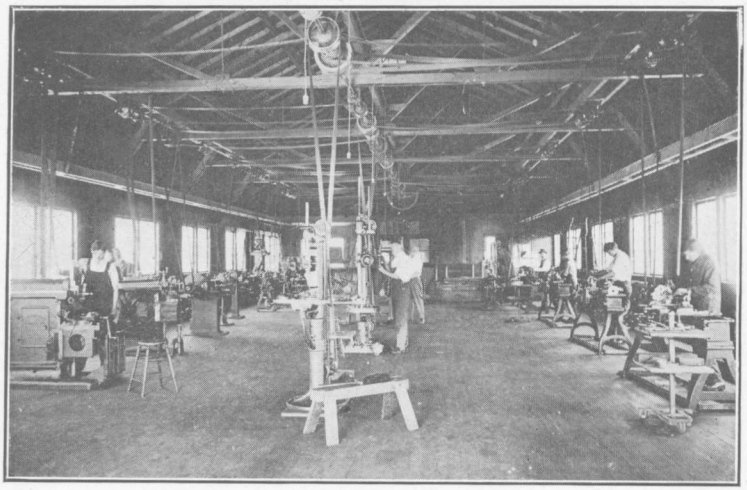


The Creamery.

The Creamery. The creamery occupies a commodious building, supplied with a hot water and steam system, electric power, pasteurizer, cream ripener, churns and separators

of various standard makes, cheese-making apparatus, a refrigerating plant of six-ton capacity; in fact, a complete and varied equipment, which not only provides for the manufacturing and handling of dairy products, but also affords an opportunity for comparative study of dairy apparatus. The creamery is in daily operation throughout the entire year.

Shops. Three fully equipped shops, 40 by 100 feet, furnish opportunity for training in wood and iron working. The carpenter shop contains benches and tools for a class of thirty men. A planer, band saw, swinging cut-off saw,



The Machine Shop.

power ripsaw, and turning lathes are included in the equipment. The forge shop contains sixteen double down-draft forges of the latest pattern, accommodating a class of thirty-two men. The machine shop is equipped with eight iron lathes, polishing lathe, universal milling machine, heavy planer, drill presses, shapers, power emery wheels, cut-off saw, and a variety of high grade finishing tools and measuring devices. All machinery of the various shops is motor driven, electric power being supplied from a complete plant owned by the school. The equipment of the shops, complete in every detail, is equaled by very few secondary schools in the country.

Laboratories. The laboratories are well equipped with instruments and apparatus for work in general and agricultural chemistry, physics (including photometry and X-ray apparatus), freehand and mechanical drawing, electricity, land surveying and irrigation, physical geography, botany and plant propagation, crops, horticulture, dairy and creamery, sewing, cooking and applied design.

The School Library. The library now contains about two thousand volumes, and this number is being steadily increased. In addition to a good collection of standard English works, there are included standard present-day works on agriculture, horticulture, animal husbandry, the household arts, electricity, and various mechanical lines. Besides the general reference works the reading room is supplied with many technical and popular magazines, daily papers, and a file of government and state agricultural publications. These are accessible at all times to students.

THE COURSES OF STUDY.

Three main lines of work are undertaken by the school, viz.: Agriculture, Mechanics and Household Arts. In all courses the work is about equally divided between class room and laboratory or shop. A student entering upon a given course of study is expected to continue the same course throughout the year. The regular courses are three years in length, upon the completion of which the student is given a diploma stating the course of study and training pursued.

The subjects to be covered and the courses of training to be pursued during the year 1912-13 are outlined on the following pages. The first, second, and third terms of the school year are indicated by *a*, *b* and *c*, respectively. Each school day is divided into nine 45-minute periods. The first number after each subject denotes the periods per week devoted to class room instruction; the second number the periods per week devoted to laboratory or shop. When the periods are the same for the three terms the letters denoting the term are omitted.

AGRICULTURE.

First Year.

Mathematics I	5– 0	English I	5–0
Agriculture I	3– 4	Freehand Drawing I	0–5
Physical Geography *a, b*	3– 2	Farm Mechanics *a, b*	0–4
Commercial Geography *c*	3– 2	Farm Carpentry	0–4
Plant Propagation *a, b*, 0–2; *c*	2– 4		

Second Year.

Mathematics II	5– 0	English II	5–0
Chemistry I	3– 4	Dairy I	3–4
Animal Husbandry I and II	2– 4	Agricultural Botany	3–4

Third Year.

Mathematics III	5– 0	U. S. History and Civics	5–0
Agronomy	1– 4	Animal Physiology *a*	3–0
Horticulture	2– 4	Agricultural Physics *b, c*	2–4
Animal Husbandry IV and V	3– 0	Agricultural Chemistry	1–4
Elective, 2 units.			

MECHANICS.

First Year.

Mathematics I	5– 0	English I	5–0
Mechanical Drawing I	0– 5	Physical Geography *a, b*	3–2
Carpentry I	0–10	Commercial Geography *c*	3–2
Forge I	0– 4	Freehand Drawing I	0–5

Second Year.

Mathematics II	5– 0	Mechanical Drawing II	0–5
English II	5– 0	Forge II *a*	0–4
Foundry *b, c*	0– 4	Physics I	3–2
Chemistry I	3– 4	Carpentry II	0–4
Machine Shop I	0– 4		

Third Year.

Mathematics III	5– 0	U. S. History and Civics	5–0
Surveying	0– 4	Physics II	2–4
Machine Shop II	0– 8	Steam and Electrical Machinery	3–4

HOUSEHOLD ARTS.

First Year.

English I	5– 0	Mathematics I	5–0
Physical Geography *a, b*	3– 2	Physiology *a, b*	5–0
Commercial Geography *c*	3– 2	Household Physics *c*	5–0
Sewing I	0–10	Freehand Drawing I	0–6

Second Year.

English II	5– 0	Mathematics II	5–0
Domestic Science I	3– 8	Chemistry I	3–4
Sewing II *a, b*	0– 5	General History	2–0
Applied Design I	0– 4	Home Gardening *c*	0–4

Third Year.

English III	5– 0	U. S. History and Civics	5–0
Botany	2– 4	Domestic Science II	3–8
Applied Design II	0– 4	Sewing III *c*	0–5
Elective, 5 units.			

STUDIES COMMON TO ALL COURSES.

Each regular student is required from the time of his registration to carry at least one course in English or history until these subjects have been completed as outlined below.

English I and II. English composition, rhetoric, and literature, equivalent to the first two years of high school English. The subject is taught with especial reference to the needs of polytechnic students.

U. S. History and Civics. A year course in the history and government of the United States, taught with the special object of developing in the student the responsibilities of citizenship.

Mathematics I. A year in elementary algebra, with a review of arithmetic.

Mathematics II. A year in plane geometry.

Mathematics III. Two terms of plane trigonometry and one term of advanced algebra.

The mathematics classes are taught with especial reference to the needs of the courses.

Chemistry I. Prerequisite, *Mathematics I.* A course in general inorganic chemistry, including elementary chemical theory and calculation. A study of all the common elements and their compounds, with emphasis upon the economic importance of each. Special attention is given to the chemistry of the home, the farm, and the shop.

Physical Geography. A study of the physical features of the land, its changes, and the effects upon soil conditions; climatic conditions, and their relation to plant growth; how to read and interpret maps. Instruction by recitation, laboratory, and field observations.

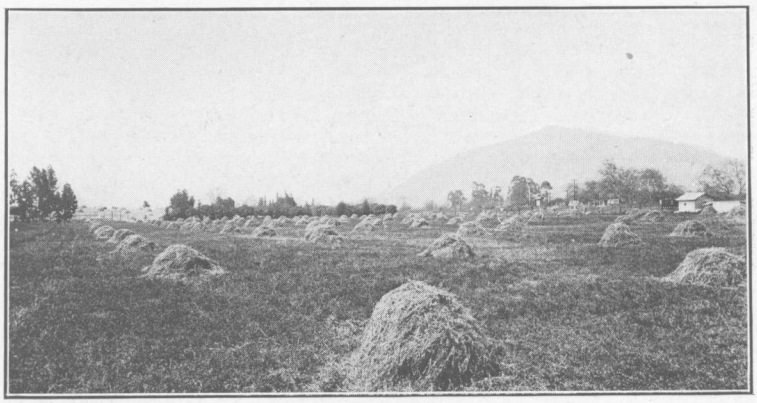
Commercial Geography. A study of the world's commerce with reference to its principal natural and manufactured products. Special attention is given to the commercial resources of California and the United States.

Freehand Drawing I. Work in pencil, charcoal, water color, and ink; study of form and proportion in pencil drawings of geometric solids, still life and plant forms; light and shade in pencil and charcoal; study of the principles of perspective. Mechanic students give special attention to perspective sketching from machine models, interiors and exteriors of buildings, freehand lettering and poster design. Agricultural students devote much time to perspective sketching from furniture and buildings; to study of plant forms in pencil and color; and to freehand lettering. Household art students devote much time to general drawing in pencil and charcoal; study of color and color schemes; the use of color in drawing of plant forms, sketches of interiors, and elementary design; freehand lettering.

AGRICULTURE.

Agriculture I. First principles of agriculture. This includes studies in soils, fertilizers, moisture conservation, farm implements, cultivation, crops and pests, and a brief history of the development and growth of agriculture as a science. The aim of the course is to give a knowledge of the important position of the farmer in the affairs of the world, and to build a broad foundation for the courses to follow. Instruction is by recitations, talks, field and laboratory work, excursions, and library reference work.

Agronomy and Farm Practice. Prerequisites, *Agriculture I, Chemistry I,* and *Botany.* First term: farm crops. A study of the principal field crops of California, their characteristics, values, preparation of the soil, cultivation, fertilization, harvesting and marketing. Second term: farm accounts. A practical study of the best methods of recording the



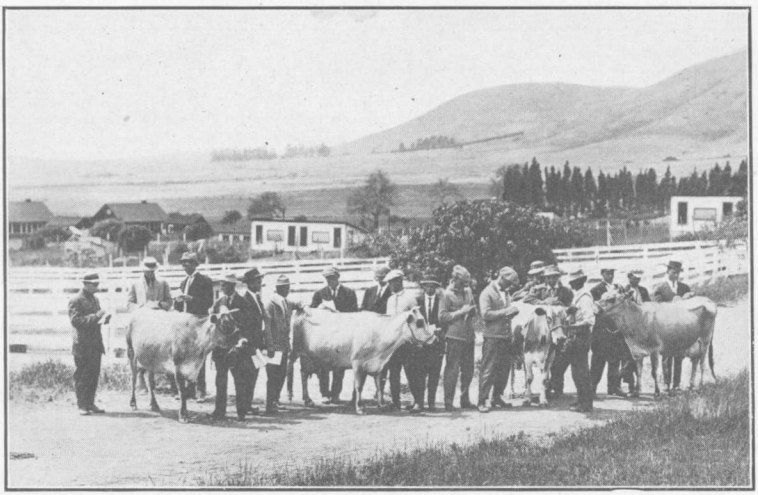
A Corner in Alfalfa.

transactions of the farm so that the farmer can tell whether any crop or herd of stock is producing at a profit or loss. Without an accurate set of accounts no farmer can tell how his business is prospering. Third term: rural economics and farm management. A general study of the economics of the farm. The course considers the market, transportation—including good roads—rural communication, coöperation, organization, and other topics of vital importance. It considers the social life of the farm home, the rural school, modern farm conveniences, the relation of the boy and girl to the farm, and the home and schoolhouses as social centers. Library research work and the preparation and reading of papers on live economic topics are required.

Plant Propagation. A course in elementary plant propagation, teaching the student how to grow ordinary plants by seeds, cuttings, bulbs, budding and grafting, with practical work in the laboratories, garden, greenhouse and field.

Agricultural Botany. A general course in practical botany, with instruction in class, laboratory and field. First term: seed germination, seed testing, and a study of roots, stems, leaves, flowers and fruit. Second term: a study of type plants with the compound microscope, tracing the development of algæ, fungi, bacteria, mosses, ferns and seed plants. Third term: a field study of weeds, grasses, wild plants, plant breeding, plant societies and economic botany. The extensive flora of the school gardens and grounds offers a very interesting and profitable field for botanical study.

Horticulture. Prerequisites, *Agriculture I, Agricultural Botany.* A year's course including instruction by recitations, lectures and laboratory work, supplemented extensively by practical work in the orchard. Especial attention is given to California fruits, their history, varieties,

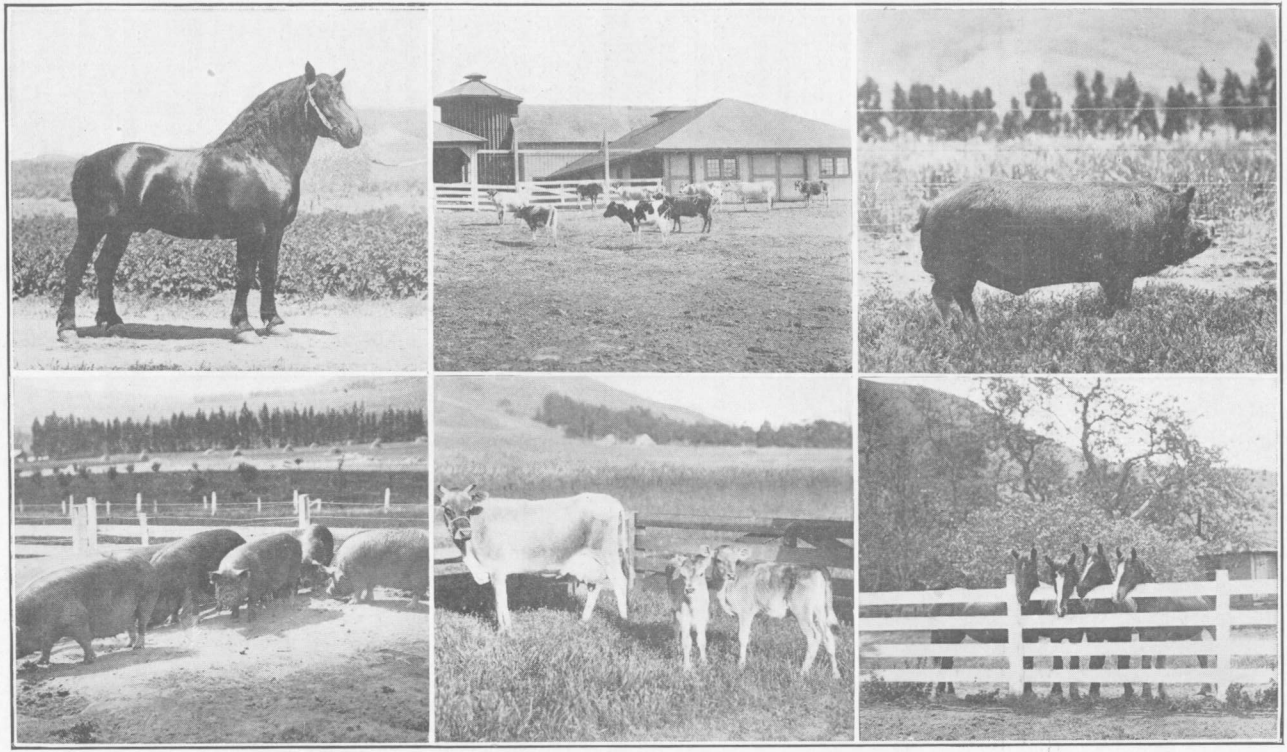


A Study in Jerseys.

insect and plant diseases, care and commercial importance. The orchard work emphasizes such important phases of the fruit industry as laying out, planting, cultivating, irrigating, pruning, budding, grafting, and spraying.

Dairying I. First term: the theory and practice of butter making, with particular attention given to the testing of milk and cream for butter fat and adulterations. Second term: the theory and practice of buttermaking continued. Butter is tested for salt and moisture, and special attention is given to pasteurization and starter making. Third term: cheese and ice cream are studied in connection with practical work in their manufacture.

Dairying II. Elective. Prerequisite, *Dairying.* This course consists of advanced studies in dairying intended for those who desire to fit themselves as testers and buttermakers in commercial creamery work.



Some Polytechnic Pure Breds.

Animal Husbandry I. Live stock judging. Market and breed types of the various classes of domestic animals are studied. Actual practice in judging is given, beginning with score card work and leading to regular comparative judging. The fine herd of animals owned by the school and other available herds are used.

Animal Husbandry II. Study of breeds. This course is given largely by lecture and text-book, with the occasional use of animals for illustration. The history and development of the different breeds of live stock are thoroughly gone over. Special attention is paid to the adaptability of each breed. This course is generally given in connection with Animal Husbandry I.

Animal Husbandry III. Live stock management. Elective. Prerequisites, *Animal Husbandry I and II.* A study of the most successful methods of handling live stock under various conditions, both for breeding and for market purposes.

Animal Husbandry IV. Principles of breeding. A study of the principles of heredity with their application to the breeding of farm animals, followed by a study of the methods of the most successful stock breeders.

Animal Husbandry V. Live stock feeding. Prerequisites, *Animal Husbandry I and II, Chemistry I.* The principles of animal nutrition; a study of the various feed stuffs; the compounding of rations, and the economics of feeding.

Animal Husbandry VI. Advanced live stock judging. Elective. Prerequisites, *Animal Husbandry I and II.* This course is intended to give advanced work in judging for students who are especially interested in Animal Husbandry. Particular attention is paid to the breed types.

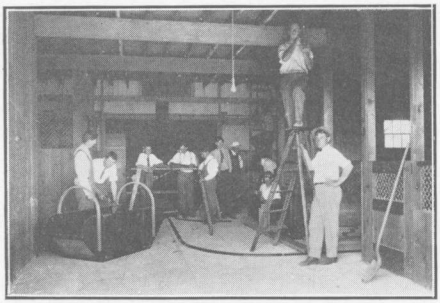
Agricultural Chemistry I. Prerequisites, *Chemistry I, Agriculture I,* A study of the relation of the science of chemistry to modern agriculture. It includes the chemistry of plant and animal life, together with the analysis of soils, fertilizers, cattle foods, dairy products, irrigation waters, and other substances of interest to the farmer.

Agricultural Chemistry II. Elective. A continuation of agricultural analysis, as outlined under Agricultural Chemistry I, intended for those who wish to do special work in this line.

Animal Physiology. Prerequisites, *Animal Husbandry I and II.* A course in elementary physiology with especial reference to the common diseases of domestic animals.

Farm Carpentry. The course includes the care and use of tools, with bench and machine work. Practice work is given in the joints commonly used in carpentry and joinery. Small individual projects may be executed.

Farm Mechanics. This course is intended to instruct the student in the repair work of the farm. It includes setting up, repairing, and caring for farm machinery; a study of the ordinary power machinery used on the farm, and instruction in forge work.



A Class in Farm Mechanics.

Agricultural Physics. A general first course in class and laboratory work covering elementary mechanics, heat, electricity, sound, and light. Much attention is given to the mechanical problems of the farm.

Surveying. Elective. Prerequisite, *Mathematics II.* Studied in conjunction with Mathematics III. The course is given as described under Mechanics, with special application to the farm.

MECHANICS.

Mechanical Drawing I. General instruction in the use of instruments; plates in freehand and mechanical lettering; solution of problems in geometrical construction and orthographic projection; and preparation of working drawings. A text-book will be used and occasional examinations given.

Mechanical Drawing II. Isometric and cabinet projections; working drawings of machine parts; tracings and blue printing. More advanced work may be assigned to students showing unusual skill.

Carpentry I. A practical course in bench and machine work. Models of the joints commonly used in carpentry and joinery are made, followed by practical work both in and out of the shop. This course includes instruction in the grinding and sharpening of tools, saw filing and work with the steel square as applied to roof framing.

Carpentry II. This course includes advanced work in cabinet making. Elementery pattern making, including lathe work and core box making, is a part of this course. The students may be allowed to make a limited number of pieces of furniture for themselves.

Forge I. This course gives practical work in both iron and steel, and includes drawing, upsetting, welding, drilling, tempering, and repair work. During the third term pieces may be made from original designs by the more advanced students.

Forge II. A course in practical toolmaking, including, for the more advanced students, the making and repairing of machine tools.

Foundry. This course includes molding and casting in white metal from patterns made in Carpentry II and from broken machine parts. Core making is also included.

Machine Work I. The course includes general instruction in the care and handling of machines, the cutting speed for various materials, the use of measuring instruments and general machine tools. Much time is given to exercise work at the lathe, shaper, drill press, and grinding machine. By prearrangement original work may be undertaken after the middle of the year.

The Carpenter Shop.

Machine Work II. Instruction is given in gear cutting, planer work, machine and engine building, the construction of models and in general repair work. Special pieces of work are assigned to students, depending on their choice and skill.

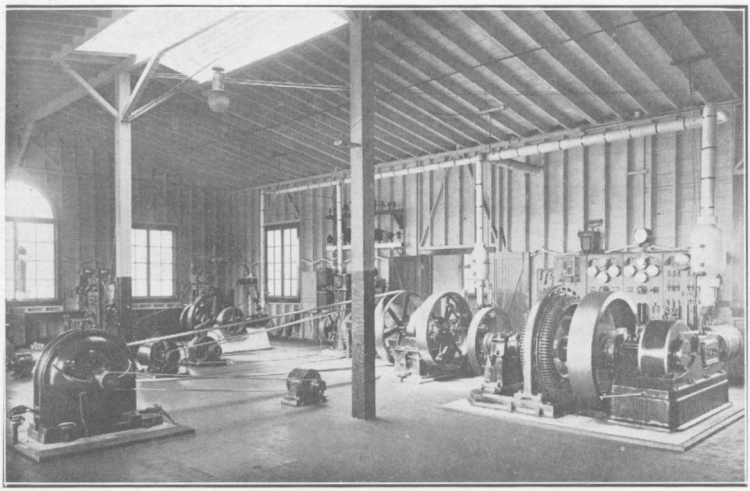
Surveying. Prerequisite, *Mathematics II.* Studied in conjunction with Mathematics III. Instruction is divided between field work and drafting room. Students learn the use of the instruments, the laying out of foundations, running ditches to grade, setting cross section stakes, with the calculation of the earth to be moved, field surveying, and the

transfer of field notes to neat form in the drafting room. An excellent equipment including high grade transits, levels, clinometers, barometers, chains and tapes is used. The large school farm offers an excellent field for the most practical work.

Physics I. Prerequisite, *Mathematics I.* The course includes instruction in class and laboratory work, in the mechanics of solids, liquids and gases, the fundamental laws and principles of electricity, batteries, and simple measurements, with the especial view to preparing the students for the mechanical work of the following year.

Physics II. Prerequisites, *Mathematics II, Chemistry I.* Class and laboratory instruction in heat, light, sound, and invisible radiations. The laboratory is well equipped with up-to-date apparatus.

Steam and Electrical Machinery. Prerequisites, *Physics I, Chemistry I, Mathematics II.* Studied in conjunction with Physics II. The course includes class room and laboratory instruction in wiring, installing, testing, and care of general electric apparatus, the operation of steam engines, valve setting, measurement of horse power, the care and opration of steam boilers, and the more common mechanical problems.



Steam-Electrical Laboratory.

The laboratory equipment includes a variety of generators, motors, transformers, testing instruments, and steam and gas engines. The laboratory work is of a very practical nature, dealing with the important points brought out in class room study. The school power plant is located in the laboratory building and instruction in its operation is given to all the men in the course.

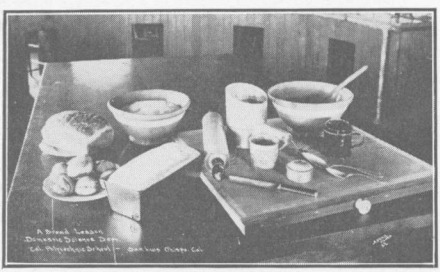
HOUSEHOLD ARTS.

Sewing I. A laboratory study of the fundamental principles of hand and machine sewing; followed by the making of undergarments and simple dresses, with instruction in patching and darning, simple embroidery, drafting and adjusting patterns. The planning of economical and tasteful wardrobes and a study of the manufacture, use, identification and prices of textiles are important features of the course.

Sewing Exhibition—First Year Class.

Sewing II. This course includes instruction in designing and making patterns, dressmaking, and the construction and trimming of hats. Each student is required to make a wool or silk dress.

Sewing III. This course includes more advanced work in practical dressmaking. As a part of the instruction in this course the student will be allowed to prepare her graduation gown.



A Bread Lesson.

Domestic Science I. Studied in conjunction with Chemistry I. The course includes a complete study of the carbohydrate foods—their source, chemical composition, cookery, digestion, and economic value. This is followed by similar consideration of the fats and proteids. In the laboratory ranges, fuels, and cleansing agents are studied and the student prepares the various foods studied in the lecture room.

Domestic Science II. Prerequisite, *Chemistry I.* Instruction in the fall term includes a review of the physiology of digestion, a study of dietaries for adults, children and the family; planning meals. In the winter term a study is made of home economics and sanitation, including the sanitary construction of houses, sanitary, economical and artistic house furnishings, systematic housekeeping, buying, and keeping accounts.

Setting the Table.

During the spring term laundering is studied for five weeks and includes methods of cleansing and agents used, hard and soft water, soaps and bluings. The remaining five weeks of the spring term are devoted to home nursing and emergencies. The laboratory instruction includes the preservation of fruit; making of bread, pastry, cake, and desserts; invalid cookery; table setting and serving; and laundry practice.

Applied Design I. A study of color and design applied to work in cardboard, raffia, reed, embroidery, stencilling, and block printing.

Applied Design II. The application of design to work in embroidery, stencilling, leather, metal and jewelry; and a study of color schemes for interior decoration.

Applied Design III. Elective. Advanced work in leather tooling, metal and jewelry.

Physiology and Hygiene. A study of the human body with special reference to the laws of health.

Household Physics. A study of the principles of mechanics, light, heat, sound, and electricity that are most frequently needed in dealing with home problems.

General History. A class room and library course in the principal periods of the history of the world.

English III. A class room and library course of instruction in English literature.

Home Gardening. A study of plant propagation, soil cultivation, and the use of fertilizers applied to the growth of flowers and vegetables in the home garden.

Botany. A general course in elementary botany including instruction on the structure, development and form of plants. The laboratory and field work includes type studies of plant groups and a collection of herbarium specimens.

Freehand Drawing II. Elective. Advanced instruction in charcoal and crayon drawings from still life, flowers and landscape; lettering, pen sketching and design.

Mathematics III or **Physics I** may be used as electives in this course. Also by special arrangement a course in woodworking may be elected.

A Class in Cooking.

ADMISSION AND CLASSIFICATION OF STUDENTS.

The school is open to any boy or girl upon the conditions stated below.

Applicants must give satisfactory evidence of good moral character and good behavior.

Applicants who are at least fifteen years of age at the time of registration will be admitted without examination upon presenting a diploma of graduation from any grammar school (eighth grade) of the State. The application for admission should be accompanied by the grammar school certificate. If not possible to send the certificate at the same time it should be sent before September 5, 1912. The certificate will be returned to the applicant after the opening of school.

Applicants seventeen years of age or over who do not hold a grammar school certificate, but who submit a recommendation from their last teacher or their superintendent of schools will be admitted upon satisfactorily passing examinations in English composition, arithmetic, United States history and geography. The subject-matter of the examinations will cover the leading facts of the grammar school course. Students applying to be admitted upon examination must send their recommendations with their application for admission. The examinations for 1912 will be held in the school buildings on Tuesday, September 10th, at nine a. m.

All applications for admission to the school must be made on the regular form as found in this circular and should be sent to the California Polytechnic School, San Luis Obispo, California, not later than September 5, 1912.

No one should apply for admission expecting to find the work easier than that of a high school. In general the courses are very different from those of the ordinary high schools and while the work is extremely interesting to the earnest student it is also exacting and requires a liberal amount of time. One who is looking for an easy course of study and plenty of leisure will never succeed at the Polytechnic.

School is held five days a week—from Monday to Friday, inclusive. When found necessary, Saturday is used for shop,

laboratory, or field work. The hours for recitation, shop, field, and laboratory work are from 8:15 to 12 and 1 to 4.

Admission of Former Students. Former students not in attendance at the school in June, 1912, will be required to make written application for readmission during the school year 1912-13. Such application should reach the office not later than September 5, 1912.

Registration and Schedule. Registration days are September 10, 1912, January 6, 1913, and April 7, 1913. A fee of $2.00 is charged for late registration. Each student is assigned to a faculty member who will act as his adviser in all matters pertaining to his course of study. Full directions as to the methods of making out daily schedules are given to the students on registration days. The schedule of each student must be approved by the proper faculty members.

The act of registering signifies acceptance of the regulations of the institution and the intention to abide by the same.

High School Credits. Since this institution is of like grade to the high schools, it follows that the academic work is of a somewhat similar nature to that of the high school. Graduates of high schools will, therefore, be given credit for work done elsewhere, such as English and mathematics. Students who have not been graduated from a high school, but who have been in attendance therein for one year or more, may be given credit for academic work for which proper credentials are presented. Entrants who have completed two full years of high school work should complete in two years the Polytechnic requirements for graduation. Applicants for advanced standing should present their high school credits with application for admission.

Regular Students. A regular student is one who is admitted to full standing upon presentation of a diploma of graduation from a grammar school or upon passing an equivalent entrance examination and who takes one of the full courses of study as heretofore outlined. All students are advised to register as regular. The essential qualifications are easily obtained by all, and the student will receive much more benefit from attendance upon the school if he or she follows the regular course of study, which has been carefully planned by the faculty.

Special Students. Entrants are not in any way encouraged to apply for admission as special students. However, those of mature age who are well prepared and who give evidence of their sincere desire to specialize along some particular line may be admitted as special students upon the following conditions:

They must fulfill all the requirements of admission for regular students and give additional satisfactory evidence of their ability to carry on the special work elected.

They must carry satisfactorily at least twenty-five units of school work per term.

The term "Special Students" is not intended to include a class of students who would like a minimum amount of time for study and a maximum amount for loafing.

GENERAL INFORMATION.

Expenses. No tuition fees are charged. Exception: students who are not citizens of the United States are charged a fee of $20.00 per term.

Students are expected to pay for the materials used in the shops and laboratories. To cover these expenses all except first-year girls are charged $15.00 per year regardless of the course of study pursued. An extra charge will be made if the student takes a greater amount of laboratory or shop work than belongs to one year of a course. The regular fee is payable in three installments of $5.00 each on registration days of the three terms. Regularly enrolled first-year girls are charged $10.00 per year, which is payable in three installments, $4.00 on registration day of the first term and $3.00 each for the second and third terms. An additional fee of $2.00 is charged for late registration. No portion of these fees will be returned to any student leaving the institution, voluntarily or involuntarily, after the fourth week of any term. The materials supplied for the above laboratory fees are chemicals, cooking materials, wood, gas, iron, drawing paper and the like.

At the time of registration a breakage deposit of $5.00 is required of each student. A general breakage charge of fifty cents per term is made. The portion of the remaining $3.50 not required to cover individual breakage will be returned June 13, 1913.

Students are required to furnish their own books, drawing instruments, and special clothing, as overalls and aprons needed in the shops and laboratories, and such special apparatus as may be needed for individual use in certain laboratory courses, such as electrician's pliers and screwdriver, in the electrical laboratory.

The total cost of books, supplies and drawing instruments together with laboratory fees is $40.00 to $50.00 for the first year. Of this amount $15.00 to $30.00, depending upon the course of study pursued, is needed at the beginning of the school year. Drawing instruments will last during the entire course. Books and other supplies may be purchased at reasonable prices in San Luis Obispo. The total necessary expense for a nine months' year including board, school fees, and books and material required, is about $260.00. This does not include railroad fare, clothing, and other personal items.

Homes for Girls. Lady members of the faculty will give special attention to finding homes in private families for non-resident girls. Students notifying the school of time of arrival will be met at the train and given every assistance needed by the newcomer. Correspondence is invited. Address, CALIFORNIA POLYTECHNIC SCHOOL.

Dormitory Residence for Boys. A new building on the school premises provides a home for a limited number of boys and a part of the faculty. The price for room and board is approximately $24.00 per month. Occupants are required to furnish linen and a portion of bedding needed. Linen and towels are laundered without extra charge.

An additional deposit of $2.50 is required of each student residing in the dormitories, to pay for possible damage to his room or to the building. Each student is held responsible for the condition of his room and its furniture. The unused portion of this deposit is returnable at the end of the school year.

Detailed information concerning the dormitory is contained in a special circular which will be mailed upon request.

Room and Board. The faculty each year assists students in finding suitable homes in private families. Students living outside the dormitory are required to board in places approved by the faculty. Prices for board and room range from $22.50

to $30.00 per month. Experience has proved that it is rarely ever advisable for students to "board themselves." Such arrangement will not be permitted except upon written request of parent or guardian and sanction of the faculty.

Self-support. A limited amount of employment about the school farm and buildings can be given more or less regularly to a few students who find it necessary to earn a portion of their expenses while attending the school. No remuneration will be made for manual work of any kind which carries instruction with it. Some students pay a part of their living expenses by means of employment found in San Luis Obispo, chiefly from private families, caring for lawns, gardens, or doing housework.

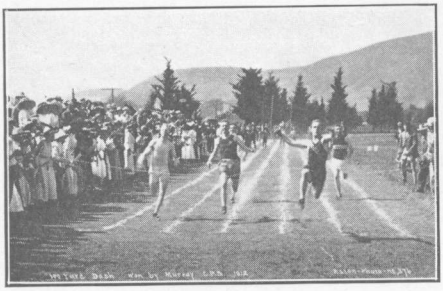
No student should come to school expecting to pay his entire expenses by labor during the school year. The school work occupies the most of the day, and the evenings are required to prepare the lessons for the following day. Provision may be made, however, for students who need to do much work in order to pay their way, whereby they may take less than the full school curriculum and thus be a longer time completing the course.

Reception of New Students. An organized reception committee composed of old students will meet all trains at the opening of the school year. Lady members of the faculty will give special attention to the girls. All new students will be assisted in finding their way to the school and to their new homes, in registering, and in becoming acquainted with the surroundings of the school and its activities.

Debate and Public Speaking. A series of debates between the Polytechnic School and local high schools serves to stimulate interest in practical public speaking. Students in the English department are also asked from time to time to present papers on subjects of current interest. Student organizations, such as the Amapola Club, (for girls), likewise provide opportunity for practical public speaking.

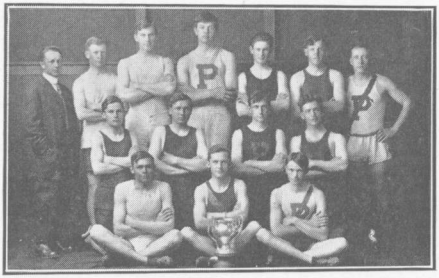
Associated Student Body. A general association, officered by students under the guidance of faculty advisers, has charge of athletics, the student publication *Polytechnic Journal,* interscholastic debates and various social activities. The

object of the organization is regulation and management of student activities outside of the regular curriculum. The plan is a marked success. The student body fees are one dollar a term for boys and fifty cents a term for girls. While no student is required to join the association, membership is strongly advised.



The Finish.

Playgrounds. The playgrounds are ample and include a football field, baseball diamond, excellent running track, and basketball and tennis courts. The Polytechnic is a member of the San Luis Bay Athletic Association, and participates with the other schools in Rugby football, baseball, basketball, tennis, and track events.



The Track Team.

Government. The purpose of the institution is to build sound character as well as to train the mind and the hand. To that end no cost is too high to keep the moral atmosphere of the school clean and wholesome. Any conduct that is deemed harmful to the morals of the school will lead to dismissal.

Boys and girls not showing an earnest purpose in making the best use of their time and energies will be reported to parents, and if satisfactory improvement is not shown within a reasonable time they will be asked to withdraw from attendance at the school. Regular attendance at all school exercises is required. A student failing to make a satisfactory grade in at least fifteen units for a term may be asked to withdraw. One hour in recitation or two hours in laboratory work each week for the term counts as a unit, if the work has been satisfactorily done. Reports of the scholarship of all students are mailed to parents at the end of each term, or oftener. Hazing in any form, subject to severe punishment under section 376*b* of the Penal Code of California, will not be tolerated, and the Board of Trustees has ordered that expulsion shall be the penalty for such offense.

In general, it may be said that no rule or regulation of the school will prove a hardship to any boy or girl who comes to the school for business and who conducts himself or herself as a gentleman or a lady.

* * * * *

Correspondence concerning the school should be addressed to CALIFORNIA POLYTECHNIC SCHOOL, *San Luis Obispo, Cal.*

STUDENTS 1911-1912.

ABBREVIATIONS.—A, Agriculture; H, Household Arts; M, Mechanics; S, special student. The year in the course is indicated by the numerals.

Ahlf, Linna	1	H	Santa Maria
Ahlf, Howard E.	1	M	Santa Maria
Anderson, Virgil Q.	1	M	Petaluma
Andrews, Winfield	1	A	San Luis Obispo
Arnold, Percy W.	1	A	The Palms
Avery, Charles Leslie	1	A	Visalia
Baldwin, Esmond L.	2	M	Los Banos
Baldwin, Frank T.	2	A	Bakersfield
Barnett, Eric James	2	M	Pope Valley
Beard, George K.	2	M	Modesto
Bell, Jewell	1	H	Taft
Bell, Fred C.	1	A	Artesia
Bennett, Jesse L.	1	M	Caliente
Bent, Ralph R.	1	A	Sausalito
Benton, Byron W.	1	A	San Francisco
Berkemeyer, Olga	1	H	San Luis Obispo
Best, Frances	1	H	La Junta, Colo.
Bissinger, G. Lyon	2	A	Lompoc

Black, Herbert E.	1	M	Santa Maria
Blossom, Elmer G.	2	A	New York City, N. Y.
Boilman, Ralph D.	2	A	Concord
Bondshu, Ivan L.	1	M	Port San Luis
Branch, Maybelle	1	H	San Luis Obispo
Brew, Hazel Glenn	3	H	San Luis Obispo
Brew, Nathaniel	2	M	San Luis Obispo
Briggs, Raymond H.	2	A	Azusa
Brinham, Harold B.	1	A	Jerseydale
Brown, E. Archibald	1	M	McKittrick
Brown, Stella	1	H	San Luis Obispo
Bush, Charles Downs	2	M	San Luis Obispo
Byers, Edna L.	1	H	Santa Margarita
Campbell, Margaret Rose	3	H	San Luis Obispo
Carty, Adolph J.	1	A	Santa Barbara
Cavanagh, Aileen	1	H	Simmler
Cheda, Maude E.	2	H	San Luis Obispo
Clark, G. Earl	1	M	Carpinteria
Clark, I. Scranton	1	M	San Luis Obispo
Clark, John K.	1	A	Los Angeles
Concepcion, Alberto A.	1	M	Berkeley
Cook, Arthur G.	2	M	Mountain View
Cook, C. Kling	2	M	San Jose
Cook, William F.	1	M	Mountain View
Cooper, Gail M.	1	A	Turlock
Cooper, Jewell L.	3	A	Turlock
Corrick, Frank J.	1	A	Santa Rosa
Coulter, Maurice E.	2	A	Oakland
Crespi, Sylvio	1	A	San Francisco
Curl, Fred A.	1	A	Pasadena
Daily, Leland C.	1	M	Los Alamos
Daily, Wendell T.	2	M	Carpinteria
Davis, Ralph Roy	3	M	Santa Maria
Dyer, Gerald T.	2	M	Santa Maria
Eastman, Phillips	2	M	San Luis Obispo
Eaton, Rudolph T.	1	M	Elsinore
Edgar, Carl R.	1	M	Santa Ana
Edmonds, Dorothy	2	H	San Luis Obispo
Edmonds, Marc Weston	3	M	San Luis Obispo
Eells, Ralph H.	2	M	Santa Ana
Eells, Robert E.	1	M	Santa Ana
Einer, Edward M.	1	M	Escondido
Evans, T. Gerald	1	M	Los Olivos
Erburu, Michael	3	A	Ventura
Fiscalini, Juan Baptiste	3	A	Cambria
Fiscalini, Katherine L.	1	H	Cambria
Fitzgerald, John Duff	2	M	San Luis Obispo
Forbes, Elmer Allen	1	M	San Miguel
Forbes, Leona	2	H	San Miguel
Ford, Alvin L.	2	A	Fullerton
Forrester, Clarence C.	1	M	Aptos
Fox, Ambrose A.	1	M	San Luis Obispo
Fridley, Eva Alice	3	H	Dinuba
Gibson, Alexander F.	1	M	Templeton
Grizzle, Olga	3	H	Corona
Grizzle, Mirvin	1	A	Corona
Hall, Fern A.	1	H	Taft
Hamaker, Charles Monroe	3	M	Nipomo
Harms, A. Fred	2	A	Santa Paula
Harris, Leon R.	1	A	Los Angeles
Hazard, Irma L.	1	H	San Luis Obispo

Heintz, Philip	1	M	San Luis Obispo
Herring, Edward L.	2	M	San Luis Obispo
Hillard, Humphreys	2	M	San Luis Obispo
Holland, Curtis G.	1	M	Hemet
Hollenbeck, Rhua	2	H	Council Bluffs, Iowa
Hollis, Elsie	S	A	Los Angeles
Hollis, Thomas	S	A	Los Angeles
Holman, Elwood H.	2	M	San Luis Obispo
Hoskins, Carl G.	1	A	Dinuba
Hubbert, Ethel A.	1	A	Oceanside
Huchting, Sophia C.	3	H	Encinitas
Janssen, Lena B.	1	H	San Luis Obispo
Jennings, Edward R.	1	A	San Diego
Johansen, Victor Hugo	1	A	Arroyo Grande
Johnson, Tekla	2	H	Templeton
Jordan, Foster L.	1	M	Cholame
Kennedy, Donald	1	A	San Luis Obispo
King, Ernest C.	1	A	Templeton
King, J. Earl	2	A	Ventura
Kirk, Martha L.	1	H	King City
Knight, Florence	3	H	Port Harford
Lopez, Lino	1	M	San Luis Obispo
Luchessa, Lincoln	2	M	San Luis Obispo
Marsh, Elsie W.	1	H	San Luis Obispo
Maxwell, Paul	1	M	Oceano
McLain, Frank J.	2	A	Oakdale
McMeekin, Albert J.	2	A	Merced
Mendenhall, Annie E.	2	H	Valley Center
Mendenhall, George F.	2	M	Valley Center
Mitchell, Donald H.	3	M	San Luis Obispo
Mizuo, Takanobu	3	A	Japan
Moore, William G.	1	A	Betteravia
Morrison, Wilber D.	1	A	Beaumont
Murray, Bernard	3	M	San Luis Obispo
Murray, Francis	2	M	San Luis Obispo
Muzio, Margaret	1	H	San Luis Obispo
Myers, Bert	S	A	Cayucos
Nelson, Walter G.	2	A	San Jose
Nelson, Walter, Jr.	1	A	San Luis Obispo
Nickle, Guy H.	1	A	Orange
Nock, William	2	M	Cambria
Nock, Archibald	1	M	Cambria
Noren, Albin	3	A	Reedley
Parker, Albert W.	1	A	Parkfield
Parsons, John E.	1	M	San Luis Obispo
Paul, Nedom A.	2	M	Morro
Peek, Arnold F.	1	A	Santa Ana
Perkins, Warren E.	2	M	Oakland
Perozzi, A. Bruno	1	M	Lompoc
Perozzi, Elvira	1	H	San Luis Obispo
Perozzi, John H.	3	M	Ashland, Oregon
Perozzi, Walter C.	2	A	San Luis Obispo
Pixley, Osman	3	A	Orange
Pryor, Frederick H.	1	A	Pacific Grove
Quintana, Ida J.	1	H	San Luis Obispo
Rapp, Signe	2	H	Pasadena
Reese, Eugene	1	M	San Luis Obispo
Reeves, Edwin A.	2	A	Santa Ana
Rice, Rolla S.	1	M	Modesto
Ridle, Ruth E.	2	H	San Luis Obispo
Righetti, Edith	1	H	Orcutt

Rowan, Catherine G.	1	H	San Luis Obispo
Sandercock, Helen V.	2	H	San Luis Obispo
Schlicht, Ethel Dorothea	1	H	San Luis Obispo
Schulze, Cora N.	3	H	San Luis Obispo
Schweizer, Joseph W.	2	A	Santa Barbara
Scott, Jesse C.	1	H	San Luis Obispo
Seabach, Alma Marie	1	H	San Luis Obispo
Shipsey, Kathleen	1	H	San Luis Obispo
Shipsey, Marguerite	3	H	San Luis Obispo
Shipsey, William T.	3	M	San Luis Obispo
Shirley, E. Clyde	1	M	San Luis Obispo
Sibley, Cassius B.	3	A	San Bernardino
Silacci, Nina Carrie	1	H	Cayucos
Sinclair, Ethel May	1	H	Estrella
Smale, Percy R.	2	M	Fallon, Nevada
Smallman, Edythe	1	H	San Luis Obispo
Smith, F. Owen	1	A	Orange
Smith, William Mavor	1	M	Nordhoff
Snyder, John E.	3	M	Orange
Southard, Fred M.	3	M	Edna
Steiner, Clara	1	H	San Luis Obispo
Stockton, Cecil L.	2	A	Ramona
Stone, Carol H.	1	A	Santa Barbara
Sutliff, Ramona P.	2	H	San Luis Obispo
Swain, Guy	1	A	Cayucos
Swartz, Charles F.	3	M	Nipomo
Tanner, Clifford Gilbert	3	A	Morro
Tanner, J. Rudolf	2	M	Morro
Terry, Mae Frances	1	H	San Luis Obispo
Thompson, Fred G.	3	A	Campbell
Thorne, Edward D.	2	A	Hanford
Tognazzini, Juliet	1	H	Cayucos
Tomassini, Florinda	1	H	San Luis Obispo
Tomassini, Luis E.	2	A	San Luis Obispo
Upton, Clara I.	1	H	Tulare
Van Gorden, Ray M.	1	M	Cambria
Wade, Lilabell	2	H	San Luis Obispo
Walker, A. Bevan	1	A	Alpine
Warren, Robert E.	1	A	Vista
Welch, Fay	2	H	Los Angeles
Welch, Paul R.	2	A	Los Angeles
Weymouth, Merton W.	3	A	Pacific Grove
Williams, Charles P.	2	A	Ocean Park
Williams, George T.	2	M	San Luis Obispo
Williamson, Orman R.	1	A	Watsonville
Wilkinson, Paul H.	2	M	Fresno
Wilmar, Ralph R.	2	M	San Miguel
Word, Ada Sybil	1	H	San Luis Obispo
Wright, A. Glenn	3	A	Fullerton
Yocum, Maurice N.	2	A	San Jose
Zanolli, Annie	1	H	San Luis Obispo
Zanolli, Elvira	1	H	San Luis Obispo

Agriculture	69
Mechanics	69
Household Arts	54
Total enrollment	192

CALIFORNIA POLYTECHNIC SCHOOL

SAN LUIS OBISPO

Application for Admission

Date _____

Name in full _____

Residence _____

Date and place of birth _____

Course of study desired _____

Parent or guardian will approve this application by signing below.

_____

_____

(Business address.)

Certificate from School Last Attended

The above-named applicant _____ *enrolled in the* _____ *School* _____ *completed* _____ *grade with the following record: Scholarship,* _____. *Deportment,* _____. *Attendance,* _____.

Dated at _____, *19*____.

I hereby recommend _____ *as a desirable student for the California Polytechnic School.*

_____

(Teacher, Principal, or Superintendent.)

Detach and mail to the
California Polytechnic School, San Luis Obispo.

SAN LUIS OBISPO, a city of 5,500 people, is on the coast line of the Southern Pacific Railway, 250 miles south of San Francisco and 225 miles north of Los Angeles. There are provided five daily trains from San Francisco and five from Los Angeles. Port San Luis, ten miles distant, is the harbor from which the Pacific Coast Railway passing through the city reaches 90 miles into the interior southward.

The climate of San Luis Obispo is a pleasing combination of sea and mountain air, moderate in temperature both summer and winter. The ocean shore ten to twelve miles distant and picturesque mountains surrounding the town make the home of Polytechnic School a delightful residence section of the State.

San Luis Obispo has churches representing the following denominations: Baptist, Catholic, Christian, Christian Science, Congregational, Episcopalian, Lutheran, Methodist, and Presbyterian, all of which welcome students who wish to find a church home during their residence at the school. The Catholic congregation occupies the famous Mission San Luis Obispo de Tolosa, established by Father Junipero Serra in 1772.

A free public library established in 1897 now contains over six thousand bound volumes and seven thousand unbound pamphlets and magazines. It occupies a $10,000 library building, which is the gift of Mr. Carnegie. Students in the Polytechnic School are granted equal privileges in the library with the residents of the city.